



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,190	05/15/2001	Raymond Clarke	13282-1	9310
7590 12/28/2006 Sheldon & Mak 225 South Lake Avenue, Suite 900 Pasadena, CA 91101			EXAMINER WEINSTEIN, STEVEN L	
			ART UNIT	PAPER NUMBER
			1761	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		12/28/2006	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.		Applicant(s)	
	09/858,190		CLARKE, RAYMOND	
	Examiner		Art Unit	
	Steven L. Weinstein		1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 11-15 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) 1 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-15 and 21-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claims 11-15 and 21-25 are rejected under 35USC112, 1st paragraph. Claim 11 and new claim 21 now recite that the packaging atmosphere "being substantially constant". As disclosed, it is not clear what this phrase means; i.e., substantially constant in what time reference. For example, the specification does disclose that the concentration ranges change significantly. Also, since an article claim can be claimed at only one point in time, it is not clear what this means, with or without a time reference. Also, as recited and as claimed, it is not clear that for whatever the time frame is for the packaging atmosphere, whether this atmosphere is the result of a modified atmosphere that is originally added to the container at the time of sealing, or whether the packaging atmosphere, its concentration and constancy, the result of the recited permeabilities. That is, the specification is not clear whether the O₂ range and whatever time it remains constant is because of the container permeabilities, the initial atmosphere, or both.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11-15 and 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scolaro ('378) in view of Cummin et al ('333) or vice versa, both further in view of Badran ('542), Badran et al ('544), Anderson ('875), Antoon ('331) and De Moor ('293), for the reasons of record, further in view of newly added J. of Experimental Botany, Tropical agriculture, Refrigeration (1973), Foods and Food

Art Unit: 1761

Ingredients (Japan 1998), Intl. Conference of CA Packaging (1984), Annals of Botany (1947), and Proc. Atm. Res. Conf. (1989), Intl. J. of Food Science and Technology (1988), and HortScience (1971). Also, as noted in the last Office action, the claims are also rejected over the same references, but using Anderson et al as the primary reference for the reasons of record.

To summarize, the preponderance of the evidence teaches that it was well established in the art, whether it is bananas or any or produce, that one manipulate all of the known variables including gas permeabilities of the packaging material, temperature, respiration rate, weight of product, etc, to provide atmospheres in the containers which are low in O₂ relative to ambient (i.e., any O₂ concentration less than 20%-except less than 1% due to the disadvantages of an anaerobic condition) and high in CO₂ relative to ambient (i.e., any CO₂ concentration greater than say 1%). Therefore, even if the claims did not fairly suggest the recited range, which they do, the art taken as a whole would fairly one of ordinary skill in the art to carry out routine and obvious experimentation (and now analog modeling) to achieve optimum results. In regard to the term "substantially constant", as noted above, there is no time frame associated with this recitation. Also, the art taken as a whole would inherently suggest, or fairly teach, that the atmosphere would be constant for some time period. As noted above, it is also not seen how this time concept is relevant to an article claim. The J. of Experimental Botany, Tropical agriculture, Refrigeration (1973), Foods and Food Ingredients (Japan 1998), Intl. Conference of CA Packaging (1984), Annals of Botany (1947), and Proc. Atm. Res. Conf. (1989), Intl. J. of Food Science and Technology (1988), and

Art Unit: 1761

HortScience (1971) are all cited as further evidence of the conventionality of manipulating the well known process variables inherent in preserving and storing produce. Note that J. of Exper. Botany discloses low O₂ is any amount less than 21%, and that ethylene levels of 15% were employed. Tropical agriculture employed a level of O₂ of 14.5%. Refrigeration shows that RQ values do not rise appreciably until the O₂ level is higher than 17. Foods and Food Ingred J JPN discloses an O₂ content of 17%. Rizvi and Intl. Atm. Res. Conf. disclose an analog computation including the known variables for produce preservation. Annals of Botany discloses an O₂ content of 14%. Intl. J. of Food Science and Technology discloses an O₂ content of 15%. HortScience discloses not only that the weight of produce affects the atmosphere in a produce package, but that the equilibrium concentration of gases are also affected.

All of applicants remarks filed 9/13/06 have been fully and carefully considered but are not found to be convincing for the reasons of record and above. Applicants main urging that the art taken as a whole does not teach the recited equilibrium gas concentration is directed to limitations not found in the claims. The claims do not recite equilibrium gas concentrations. They are silent in this regard. The claims do recite that the atmosphere is substantially constant, but, as noted above, this term is not clear and no time is recited. It is also urged that the recited gas concentration range achieves unexpected results. The data supplied in the specification is not convincing of unexpected results. It is not clear if the data is commensurate in scope with the claimed invention. For example, does the container have the recited permeabilities? Also, how many trials were performed, how long was the concentration at the range, and would

Art Unit: 1761

the results be similar if one used 13.5%? Note, too, it is disclosed in the specification that the packaging atmosphere for at least part of the period is at least 10%. Thus, the specification is more indicative of optimization rather than an unexpected result.

Applicant asks that copies of the IDS's be initialed and mailed out. It would appear that this has already been done since initialed copies are present in the Office electronic file (eDan). In regard to the IDS's, applicant has filed a plethora of references. In the interests of accuracy, and in view of the crowded nature of the art, applicant is invited to note any reference or references from the IDS's that he may feel is/are particularly relevant (or more relevant) to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven L. Weinstein whose telephone number is 571-272-1410. The examiner can normally be reached on Monday-Friday 7:00 A.M.-2:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 571-272-1398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1761

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steve Weinstein
STEVE WEINSTEIN 1761
PRIMARY EXAMINER
12/22/06